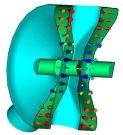
Introduction - 2nd Day

Frank Krawczyk
LANL

Workshop on the Advanced Design of Spoke Resonators

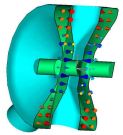
Los Alamos, NM, USA
October 7 and 8, 2002



Los Alamos NATIONAL LABORATORY

Summary first day

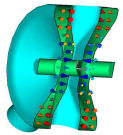
- We saw a wide range of interesting presentations that represent the major issues related to the design of spoke resonators.
- Cleanliness is a key issue for high field operation of these cavities.
- The test results presented show that spoke resonators are capable of gradients well above 10 MV/m, even at very low beta.
- This morning we will talk about control issues, MP, HOMs, power couplers and cryomodules.
- After lunch we will see some ideas related to alternate concepts in structures and operational issues.



Summary first day

For the discussion session we could talk about:

- Did we see anything that helps simplify resonator design?
- We saw from Ken and Evgeny that short multigap spokes are planned as a next step after testing a variety of single spoke cavities. Are there other important structures/tests that should be done next?
- We saw that spokes at low beta mean poor real estate gradients. Are there any ideas on how to improve that (e.g. low beta multigap spokes, what do these mean to availability?)
- For what applications/parameters are spoke resonators a viable alternative to ellipticals? How high in beta can we go?
- Understanding of the Q-slope to run at 2 or 3 K?



Workshop Program

				2nd DAY		
Time	**Talk**	**Disc.**	**Topic**		**Speaker**	**Chair**
8:30	0:05	0:00	Introduction		F. Krawczyk	
8:35	0:15	0:05	Controls	Overview	J. Delayen	B. Rusnak
8:55	0:15	0:05	Microphonics	RIA Experiments	M. Kelly	
9:15	0:15	0:05	Power Coupler	ANL:RIA	B. Rusnak	T. Tajima
9:35	0:15	0:05		LANL:AAA	F. Krawczyk	
9:55	0:10	0:05	Misc. Issues	Multipacting	F. Krawczyk	B. Rusnak
10:10	0:10	0:05		HOMs for Pulsed Operation	T. Grimm	
10:25	0:00	0:15	Break			
10:40	0:15	0:10	Cryomodule	ANL:RIA	J. Fuerst	C. Pagani
11:05	0:15	0:10		CNRS:XADS/Eurisol	J.-L. Biarrotte	
11:30	0:15	0:10		LANL:AAA	P. Kelley	
11:55	0:00	1:05	Lunch Break			
13:00	0:15	0:05	Alternate Concepts	High β Spokes/Pulsed Ops	K. Shepard	J. Delayen
13:20	0:15	0:05		Consideration of 2K Ops	T. Tajima	
13:40	0:15	0:05		Re-entrant Cavities	A. Facco	
14:00	0:15	0:05		SC CH Cavities	A. Sauer	
14:20	0:10	0:05		RF-Focussing Spoke	B. Garnett	
14:35	0:00	0:30	Discussion	What do we need to advance the technology?	All	K. Shepard
15:05	0:00	0:10	Closing Remarks		F. Krawczyk	
15:15			END			
Talks	**7:45**					
Disc.	**5:10**